

IN THE CLAIMS:

1. (currently amended) ~~Apparatus~~An apparatus for manipulating a ribbon of material, said apparatus comprising:

~~a first mechanism for accepting~~ a spindle head including a pair of jaws engaging a first end of the ribbon of material along an axis;

a first mechanism for moving said spindle head substantially parallel to the axis;

a second mechanism for rotating ~~an end of the ribbon of material; and~~

~~a third mechanism for moving said second mechanism substantially parallel to the axis, said third~~ said pair of jaws about the axis with said first mechanism moving said spindle head substantially parallel to the axis, said second mechanism configured to operate independently from the operation of said ~~second~~ first mechanism.

2. (currently amended) ~~Apparatus~~An apparatus in accordance with Claim 1 wherein the ribbon has a helical shape having a plurality of triangular shaped facets.

3. (currently amended) ~~Apparatus~~An apparatus in accordance with Claim 2 wherein the plurality of facets are of similar size and shape.

4. (currently amended) ~~Apparatus~~An apparatus in accordance with Claim 1 wherein ~~said third~~ the first mechanism is configured to move ~~said second mechanism~~ the spindle head through a first movement phase, the first movement phase including an initial speed, acceleration, deceleration, and an ending speed.

5. (currently amended) ~~Apparatus~~An apparatus in accordance with Claim 1 further comprising ~~a second~~ an additional second mechanism such that said apparatus can rotate two strands of ribbon simultaneously.

6. (canceled)

7. (currently amended) ~~Apparatus~~An apparatus in accordance with Claim 1 wherein said ~~first mechanism~~ pair of jaws is configured to accept a metal ribbon.

8. (currently amended) ~~Apparatus~~An apparatus in accordance with Claim 1 further comprising a die positioned downstream of said second mechanism, said die configured to cut the ribbon.

9. (currently amended) ~~Apparatus~~An apparatus in accordance with Claim 1 wherein said second mechanism comprises at least one servo motor configured to rotate the ribbon.

10. (currently amended) ~~Apparatus~~An apparatus in accordance with Claim 1 wherein said ~~third~~ first mechanism comprises a servo motor configured to move said ~~second mechanism~~ spindle head.

11. (currently amended) A method of fabricating a turbulator utilizing an apparatus, said method comprising:

engaging a first end of a ribbon of material with a spindle head;

moving the spindle head engaging the first end of the material along an axis, wherein the movement is performed in a first movement pattern; and

rotating the first end of the material about the axis as the spindle head is moved along the axis, wherein the rotation is performed in a second movement pattern, wherein the first movement pattern is different from the second movement pattern.

12. (original) A method in accordance with Claim 11 wherein the rotation is other than constant rotation.

13. (original) A method in accordance with Claim 11 wherein the acceleration of the material in the first direction is different from the acceleration of the rotation of the material.

14. (currently amended) A method in accordance with Claim 11 further comprising:

cutting the ribbon to form a first cut end; and

feeding the first cut end to the ~~second mechanism~~ spindle head.

15. (original) A method in accordance with Claim 14 further comprising cutting the ribbon to form a second cut end.

16. (original) A method in accordance with Claim 15 further comprising releasing the cut, formed ribbon.

17. (currently amended) A method in accordance with Claim 11 further comprising providing the ribbon to the spindle head with ~~[[the]]~~a correct tension.

18. (original) A method in accordance with Claim 11 wherein the spindle head includes a pair of jaws, said method further comprising engaging the ribbon with the pair of jaws.

19. (original) A method in accordance with Claim 11 wherein the apparatus includes a first servo motor configured to provide axial movement to the material.

20. (original) A method in accordance with Claim 19 wherein the apparatus includes a second servo motor configured to rotate the material.